



ARDEX WPM 116

Fibre Backed Base Sheet

Excellent elongation

Cold flexibility to -5°C

Designed for heat sensitive substrates

3.0mm APP Bitumen Fibre Backed Base Sheet

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PRODUCT DESCRIPTION

ARDEX WPM 116 is an A.P.P. (Atactic Polypropylene) Plastomeric type modified bitumen membrane base sheet, consisting of a specially formulated bituminous compound of distilled asphalt modified with selected high grade visco-elastic polymers. The product is reinforced with a combination of fibreglass and non-woven polyester.

ARDEX WPM 116 top surface is embossed and protected by a heat sensitive polythene film. This type of finish for the top surface has been chosen for two specific purposes:

- To act as a temperature gauge during application. When the film melts it shows that the compound is at the correct temperature.
- To allow the gases to rapidly escape when heated to its correct installation temperature avoiding possible problems of bubbling and blistering.

FEATURES

- Excellent elongation
- Cold flexibility -5°C
- Good mechanical characteristics
- Good dimensional stability
- Good puncture resistance

USES

ARDEX WPM 116 is installed as a base sheet in multilayer waterproofing systems. ARDEX WPM 116 has been specifically designed for applications to heat sensitive substrates such as:

- Plywood
- Timber decks
- Thermal insulation board

Due to the underside fibre-backing, ARDEX WPM 116 can be installed as a base-layer on rough or un-even concrete decks, and allows vapour permeating through the substrate to diffuse underneath the waterproofing system.

The placement of the ARDEX Torch On Vapour Vents shall be as nominated by the engineer/consultant. As a guide, the placement per vent is at the highest point(s) of the area, with one vent to be placed every 50m^2 - 100m^2 and must be placed at the furthest point from drains.

SUBSTRATE PREPARATION

By way of mechanical methods and vacuum cleaning as necessary, remove all dirt, dust, curing compounds, oils, grease, surface sealers, and any other contaminants prior to application. Prepare surface to leave sound, clean, free from sharp edges, loose or other materials which may damage the membrane.

Damaged concrete between 2mm-30mm can be treated with

ARDEX A46. Spalling concrete must be treated accordingly with the ARDEX Concrete Repair range such as ARDEX BR 345, please review the respective product data sheets on treating spalling concrete.

DAMP OR GREEN CONCRETE

Apply two coats of ARDEX WPM 300 (HydrEpoxy) at a rate of $3\text{m}^2/\text{litre}$ (per coat) and allow to dry for a minimum of 24 hours. Drying times will vary depending on substrate temperatures and ambient air conditions. Once the ARDEX WPM 300 (HydrEpoxy) has cured, apply a neat primer coat of ARDEX WA 98 Adhesive and allow to become tacky before installing ARDEX WPM 116.

NOTE: If the ARDEX WPM 300 (HydrEpoxy) is not allowed to fully cure, the application of ARDEX WA 98 Adhesive will noticeably damage the uncured ARDEX WPM 300 (HydrEpoxy).

INSTALLATION

ARDEX WPM 116 may be installed on prepared substrates via two methods:

1. Mechanically fixed system
2. Fully adhered system

A combination of both methods may be used, dependent on the application and environment.

MECHANICALLY FIXED SYSTEM

This method of installation can be used over existing failed membranes, heat sensitive substrates, concrete, or thermal insulation board.

Unroll the ARDEX WPM 116 and set into position to be mechanically fixed. The type/dimension of the mechanical fixing and frequency shall be as nominated by the engineer/consultant such as to be sufficient to hold under the most extreme wind lift forces likely to be experienced. Generally, a mechanical fixing is placed every 50cm - 100cm around the perimeter of the membrane, with the adjacent membrane sheet layered over the fixing to encapsulate. In extreme conditions additional fixings may be placed in the centre of ARDEX WPM 116 spaced 1 meter apart. The subsequent membrane layers will encapsulate the center fixings.

Using an LPG gas torch, fuse the laps of the ARDEX WPM 116 to form a continuous membrane layer, with minimum side laps of 50mm and minimum end laps of 120mm.

FULLY ADHERED SYSTEM

Fold ARDEX WPM 116 sideways to expose half of the membrane underside. Apply ARDEX WA 98 Adhesive to prepared substrate using a roller at a coverage rate of 2m^2 - 2.5m^2 per litre. Allow ARDEX WA 98 Adhesive to become tacky, generally between 5 to 20 minutes depending on substrate temperature and ambient air conditions, prior to working the folded half of the membrane back into position. During application care must be taken to not incorporate air

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bubbles under the membrane or wrinkles in the membrane. Repeat the process for the rest of the sheet. Once ARDEX WPM 116 has been installed onto the applied adhesive begin to firmly roll the membrane with either a weighted roller or a large water filled heavy roller to achieve a sound bond.

Using an LPG gas torch, fuse the laps of ARDEX WPM 116 to form a continuous membrane layer, with minimum side laps of 50mm and minimum end laps of 120mm.

Ensure the ARDEX WA 98 Adhesive has completely dried prior to using any heat source such as an LPG gas torch. A minimum of 1 - 2 hours is suggested, longer drying times may be required depending on environment and ambient air conditions.

PACKAGING

Roll size: 1.05m x 10m
(Fleece is 1.0m wide leaving 50mm selvedge for lap bonding)

Roll weight: Approximately 30kg

Rolls per pallet: 28

TECHNICAL DATA

CHARACTERISTIC	TEST METHOD	NOMINAL VALUES
Length	EN 1848-1	10m
Width	EN 1848-1	1.05m
Thickness	EN 1849-1	3mm
Flow Resistance at Elevated Temperature	EN 1110	100°C
Flexibility at Low Temperature	EN 1109	-5°C
Tensile Strength Longitudinal Transversal	EN 12311-1	400 N/50mm 300 N/50mm
Elongation at Break Longitudinal Transversal	EN 12311-1	50% 50%
Tear Resistance	EN 12310-1	90N
Surface Finishes	Lower ¹ Top ²	Polyester Torch film

Note 1) Lower surface; the surface which is applied to the structure being waterproofed.

Note 2) Top surface; exposed to underside of covering membrane.

STORAGE

All rolls of ARDEX WPM 116 should be stored in a covered area protected against sunlight and UV radiation. Rolls should be stored in a vertical position on a smooth floor so as not to damage the edges.

LIMITATIONS

The application of ARDEX WA 98 Adhesive must be used for external applications only. ARDEX WA 98 Adhesive is a highly flammable liquid and vapour, and must be used only in well ventilated area(s). When not in use, ensure lid is tightly placed back on packaging. Ensure ARDEX WA 98 Adhesive is removed from the area when using LPG gas torch or other heat sources. ARDEX WPM 116 should not be used as a stand alone waterproofing membrane, but must be used as part of a multi-layer waterproofing system. ARDEX WPM 116 cannot be left UV exposed for extended periods. ARDEX WPM 116 should not be applied on upturns/vertical applications.

Before any substrate preparation, installation or finishing methods relating to ARDEX product are undertaken, please be aware of any potential risks and use appropriate PPE (personal protective equipment). This may involve contacting substrate manufacturers for Safety Data Sheets.

SAFETY DATA

Avoid contact with skin and eyes. In case of contact with the eyes rinse with running water until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Wear protective gloves, clothing, face and eye protection. Suspected of causing cancer. This product is combustible. On combustion, may emit toxic fumes of carbon monoxide (CO). Avoid inhaling dust/ fume/ gas/ mist/ vapours/ spray. If fumes or combustion products are inhaled remove from contaminated area. Ensure adequate ventilation during application. Check with your local Council regarding the disposal of contents. Call the Poisons Information Centre on 131 126 (AUS) and 0800 764 766 (NZ) or call a doctor if you feel unwell. At times updates can occur to data. To ensure you have the most current technical and safety information please consult the latest data sheets found on the product page at www.ardexaustralia.com

GUARANTEE

ARDEX Australia Pty Ltd ("we" or "us") guarantees this product ("our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 10 years from the date of purchase. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or compensation, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX Australia Pty Ltd, 20 Powers Road Seven Hills NSW 2147; Toll Free: 1800 224 070; Email: technicalservices@ardexaustralia.com) and provide evidence of your purchase of the product within 30 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a "consumer" under the Australian Consumer Law and to that extent you need to be aware that: "Our goods come with guarantees

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that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss of damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure”.

DISCLAIMER

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standards. Our instructions and recommendations are only for the uses they are intended. Users are advised to confirm that this product is suitable for their application and conforms with the specifications of the system. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.

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